DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-025281 Address: 333 Burma Road **Date Inspected:** 23-Jul-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai

CWI Name: CWI Present: Yes No Yes N/A **Rod Oven in Use:** Yes No **Inspected CWI report:** No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Trial Assembly 13W

This QA Inspector witnessed the in-process high strength bolt installation on bolts connecting the following connections:

- Vertical connection plates connecting longitudinal diaphragm (W3) to longitudinal diaphragm (W4) at PP120 to PP120.5 and PP122 to PP122.5. Tensioning is in progress.
- Horizontal connection plates connecting longitudinal diaphragm to deck panels at W3 and W4 lines between PP117.5 and PP120. Tensioning is in progress.
- Horizontal stiffeners connecting Longitudinal Diaphragms to Floor Beams at W3 and W4 lines at PP120, PP120.5, PP121, PP121.5, PP122, & PP122.5. Pre-tensioning is in progress.

Bolting on the above named areas is in progress and still requires final tension verification prior to final acceptance. The QA Inspector verified installation of the high strength bolts on a random basis and the results appeared to be in general compliance. No notifications have been issued for these installations.

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This inspector conducted review of the following high strength bolts brought out to Segment 13 W for installation at connections requiring the size and length required as specified on contract drawings. All bolts were found to have been sampled and tested in accordance with AISC standards and in accordance RCSC 2000 edition:

M27x95 - Set No. DHGM270034, Lot No.(s) SB541Z, PR731Z, & C1168Z.

M22x65 - Set No. DHGM220128, Lot No.(s) PR791Z, PS121Z, & C0496Z.

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Architectural Housing to Segment 13AW at counter weight side from Panel Point PP118 to Panel Point PP120. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00705 dated July 23, 2011.

The bolt sizes used were M22 x 70 RC Lot # DHGM220137 and the final torque value established was 400 N-m.

The Manual Torque wrench used was Serial No. XO2-676.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents



Summary of Conversations:

Pertinent conversations are included in the body of the report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Rene	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer